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| 10/814,834 | 03/31/2004 | Yuh-Cherng Wu | 13906-153001 / 2003P00948 | 6490 |

| | | | EXAMINER |
|---|---|---|---|
| 32864 | 7590 | 09/27/2006 | CHU, GABRIEL L |

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| ART UNIT | PAPER NUMBER |
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| 2114 | |

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Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

| | Office Action Summary | Application No. | Applicant(s) |
| | | 10/814,834 | WU ET AL. |
| | | Examiner | Art Unit |
| | | Gabriel L. Chu | 2114 |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)☒ Responsive to communication(s) filed on <u>31 March 2004</u>.

2a)☐ This action is **FINAL**.    2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)☒ Claim(s) <u>1-20</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-20</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

## Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>26 April 2004</u> is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All    b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date <u>0808 0307 0331</u>.

4) ☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application

6) ☐ Other: _____.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 101*

1.      35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

**Claims 14-20 rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.** Claims 14-20 claim a "computer program product tangibly embodied in an information carrier". From paragraph 113 of the pre-grant publication, Applicant has indicated that while such a carrier may be circuitry, hardware, firmware of firmware, it may be as ambiguous as "software" which may be interpreted as disembodied, and that Applicant has further defined such "tangibly embodied" as "in a machine readable storage device or in a propagated signal". An example of language considered to meet the statutory requirements would be "instructions stored in a computer storage medium".

### *Double Patenting*

2.      The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees.   A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and  *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

         A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory

double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3.      **Claims 1, 14, 16 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 24 of copending Application No. 10/814836.** Although the conflicting claims are not identical, they are not patentably distinct from each other because both sets of claims disclose diagnostic procedures that result in failure that is remedied by a solution initiated by a user from a display. Claims 1, 14, 16 of the instant application therefore are not patently distinct from '836 (In re Goodman). Further, claims 1, 14, 16 of the instant application claim subset elements of '836, and as such are not patentably distinct (Georgia-Pacific Corp. v. United States Gympsum Co.).

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

### Claim Objections

4.      Claims 13, 15, 18 objected to because of the following informalities:

Referring to claims 13, 15, 18, "that is associated" is understood to refer to "that are associated".

Appropriate correction is required.

### Claim Rejections - 35 USC § 103

5.      The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

6.      **Claims 1-3, 5, 7, 9-11, 13-18 rejected under 35 U.S.C. 103(a) as being**

**unpatentable over US 5748880 to Ito et al. in view of US 2002/0122050 to**

**Sandberg.** Referring to claim 1, 14, Ito et al. discloses a method of performing

diagnosis in a computer system, the method comprising: performing in a computer

system a plurality of automated diagnostic procedures that each either fails or passes

depending on at least one condition in the computer system (From the abstract, "A

computer-supervising system includes a centralized supervisor unit for supervising

numerous computers connected to each other via a network." From line 9 of column 4,

"The self-fault supervising means 24 supervises the computer 20 itself for faults, and

sends an error message to the centralized supervising/relay means 23 when a fault

occurs.");

if any of the automated diagnostic procedures fail, displaying identifiers of failed

automated diagnostic procedures on a graphical user interface of the computer system

for selection by a user (From the abstract, "a message display device for displaying

error messages corresponding to the faults, respectively, on a display screen, together

with classification data added thereto by the computers".);

and displaying on the graphical user interface a user-selectable input control that,

upon user selection of a displayed identifier, can initiate a remedy procedure that is

associated with the failed automated diagnostic procedure (From the abstract, "a fault-

selecting device for selecting one of the error messages displayed on the display

screen, according to an operation of an operator; a recovery procedure display device

for reading one of the recovery procedures stored in the recovery procedure-storing

device based on the selected one error message which corresponds to one of the

faults, and for displaying the read one recovery procedure on the display screen; and a

recovery-executing device for executing, by an operation of the operator, the read and

displayed one recovery procedure to recover from the one fault corresponding to the

selected one error message".).

Although Ito does not specifically disclose the remedy procedure may be

automated, automatic remedy procedures are well known in the art. An example of this

is shown by Sandberg, from paragraph 54, "Referring again to FIG. 6, in addition to the

individual component fix buttons 720, 820, and 920, a fix all button 610 or other

graphical visual icon is provided on the Summary page (or other initial default property

page) for affirmatively entering a command to the cable modem diagnostics application

115 to perform the function calls necessary to automatically fix all of the demarcated

problems if possible. The fix all button 610 is enabled when problems have been

demarcated or disabled when there are no problems as appropriate. If enabled, clicking

on the button causes the cable modem diagnostics application 115 to perform the

following logic: For each functional area (CPE-Software, CPE-Hardware,

CableNetwork) For each component If status is `broken` then If Diagnostics can

automatically fix component, execute its Fix function Else Report that Diagnostics could not automatically fix the component". A person of ordinary skill in the art at the time of the invention would have been motivated to automate the remedy procedure because, as indicated by Sandberg in paragraph 5, "When service loss occurs, it is desirable to restore it as quickly, and cheaply, as possible." Further, Ito discloses that prompt recovery is a goal of the invention, from line 57 of column 1, Further, it has been conventionally required of the operator to grasp recovery procedures for recovery from all the faults. Further, even with faults of the same kind, if different recovery procedures are required for different computers, the operator is required to be aware of so many procedures for recovery from the faults, which prevents the operator from promptly effecting recovery from such faults."

7.      Referring to claim 2, Ito in view of Sandberg discloses the automated remedy procedure comprises a troubleshooting procedure designed to identify a problem source that may have caused the failed automated diagnostic procedure to fail (From Ito, figures 5-8. From the abstract of Sandberg, "Icons, colors, and sounds are used to direct the user to the exact cause of the problem within the relevant category.").

8.      Referring to claim 3, Ito in view of Sandberg discloses the automated remedy procedure is designed to remedy a problem that may have caused the failed automated diagnostic procedure to fail (From Ito, figures 6-8, recover.).

9.      Referring to claim 5, Ito in view of Sandberg discloses the plurality of automated diagnostic procedures comprises at least one installation automated diagnostic procedure (From paragraph 57 of Sandberg, "The functions of the CPE-Software

property page are to check various elements of the CCCM software requirements. This

generally involves checking that correct files exist in correct locations, and that various

software components are installed and configured correctly.").

10.     Referring to claim 7, Ito in view of Sandberg discloses a failure of at least one of

the automated diagnostic procedures **comprises** one selected from the group

consisting of: an informational message, an advisory, a warning, a fatal error

notification, and combinations thereof (From Ito, figure 6, wherein a failure of a

diagnostic results in the display of error messages 50, but also

informational/advisory/warning/fatal messages such as 51/c.).

11.     Referring to claim 9, Ito in view of Sandberg discloses receiving a predetermined

input upon the user selecting the user-selectable input control (From the abstract, "a

fault-selecting device for selecting one of the error messages displayed on the display

screen, according to an operation of an operator; a recovery procedure display device

for reading one of the recovery procedures stored in the recovery procedure-storing

device based on the selected one error message which corresponds to one of the

faults, and for displaying the read one recovery procedure on the display screen; and a

recovery-executing device for executing, by an operation of the operator, the read and

displayed one recovery procedure to recover from the one fault corresponding to the

selected one error message".).

12.     Referring to claim 10, Ito in view of Sandberg discloses performing the

automated remedy procedure in response to receiving the predetermined input (From

the abstract, "a fault-selecting device for selecting one of the error messages displayed

on the display screen, according to an operation of an operator; a recovery procedure

display device for reading one of the recovery procedures stored in the recovery

procedure-storing device based on the selected one error message which corresponds

to one of the faults, and for displaying the read one recovery procedure on the display

screen; and a recovery-executing device for executing, by an operation of the operator,

the read and displayed one recovery procedure to recover from the one fault

corresponding to the selected one error message".).

13.     Referring to claim 11, Ito in view of Sandberg discloses receiving user input

during the automated remedy procedure (From line 66 of column 5 of Ito, "The menu

indication area 51g displays a menu of functions utilized in recovery from the fault. If

"LOG" is selected by the cursor 50d, a log (recovery history) of the preceding recovery

operation corresponding to the selected error message is read from the hard disk drive

15, and displayed on the recovery procedure indication area 51e, as shown in FIG. 7,

as a window of a recovery log display screen 52. The operator performs operations

according to indications on the recovery procedure indication area 51e or the recovery

log display screen 52, to execute recovery from the fault. When the recovery is

completed, the operator selects "RECOVERED" on the menu indication area 51g. In

response to the selection, the recovery operation screen 51 is terminated, and the

status column 50a of the error message display screen 50 is changed from

"RECOVERING" TO "RECOVERED". This change of indications is also effected on the

other terminal units 12, 13.").

14.    Referring to claim 13, 15, 18, Ito in view of Sandberg discloses a plurality of

automated remedy procedures, and wherein the user-selectable input control can

initiate any of the plurality of automated remedy procedures that is associated with a

selected one of the plurality of automated diagnostic procedures (From Ito, figures 5-8,

wherein plural recoveries are displayed, wherein those that are associated with one of

diagnoses are selectable by a user for recovery.).

15.    Referring to claim 16, Ito discloses the graphical user interface comprising: an

identifier presentation area for displaying, upon a plurality of automated diagnostic

procedures being performed in a computer system, identifiers of any of the automated

diagnostic procedures that fail, for selection by a user (Figure 5.);

          and a user selectable input control for initiating, following user selection of a

displayed identifier of a failed automated diagnostic procedure, a remedy procedure that

is associated with the failed automated diagnostic procedure (Figures 6-8).

          Although Ito does not specifically disclose the remedy procedure may be

automated, automatic remedy procedures are well known in the art. An example of this

is shown by Sandberg, from paragraph 54, "Referring again to FIG. 6, in addition to the

individual component fix buttons 720, 820, and 920, a fix all button 610 or other

graphical visual icon is provided on the Summary page (or other initial default property

page) for affirmatively entering a command to the cable modem diagnostics application

115 to perform the function calls necessary to automatically fix all of the demarcated

problems if possible.  The fix all button 610 is enabled when problems have been

demarcated or disabled when there are no problems as appropriate.  If enabled, clicking

on the button causes the cable modem diagnostics application 115 to perform the

following logic: For each functional area (CPE-Software, CPE-Hardware,

CableNetwork) For each component If status is `broken` then If Diagnostics can

automatically fix component, execute its Fix function Else Report that Diagnostics

could not automatically fix the component". A person of ordinary skill in the art at the

time of the invention would have been motivated to automate the remedy procedure

because, as indicated by Sandberg in paragraph 5, "When service loss occurs, it is

desirable to restore it as quickly, and cheaply, as possible." Further, Ito discloses that

prompt recovery is a goal of the invention, from line 57 of column 1, Further, it has been

conventionally required of the operator to grasp recovery procedures for recovery from

all the faults. Further, even with faults of the same kind, if different recovery procedures

are required for different computers, the operator is required to be aware of so many

procedures for recovery from the faults, which prevents the operator from promptly

effecting recovery from such faults."

16.     Referring to claim 17, Ito in view of Sandberg discloses the user-selectable input

control is displayed before the user selection of the displayed identifier (Figure 10, s11-

s21).

17.     **Claim 4 rejected under 35 U.S.C. 103(a) as being unpatentable over US**

**5748880 to Ito et al. in view of US 2002/0122050 to Sandberg as applied to claim 1**

**above, and further in view of "error rate" by MSCD.** Referring to claim 4, Ito in view

of Sandberg discloses the plurality of automated diagnostic procedures **comprises** at

least one selected from the group consisting of: an application based automated

diagnostic procedure and another automated diagnostic procedure (From line 27 of

column 5 of Ito, "The classification column 50b indicates a category to which each error

message of the message column 50c belongs, i.e, a system category, a network

category, a job category, or a performance category. If an error message does not

correspond to any of these categories, "OTHERS" is indicated.").

Although Ito does not specifically disclose "content based" diagnostics, this is

well known in the art. An example of this is error rate, from MSCD, "In communications,

the ratio of the number of bits or other elements that arrive incorrectly during

transmission." A person of ordinary skill in the art at the time of the invention would have

been motivated to look at error rate data because it describes problems in transmission.

Ito in particular would have been interested because, as noted above Ito is concerned

with various categories of error including network errors.

18.     **Claim 6 rejected under 35 U.S.C. 103(a) as being unpatentable over US**

**5748880 to Ito et al. in view of US 2002/0122050 to Sandberg as applied to claim 1**

**above, and further in view of US 2002/0083156 to Wysoczynski.** Referring to claim

6, although Ito in view of Sandberg does not specifically disclose the automated remedy

procedure comprises restoring at least one customized setting in the computer system

to a default setting, going back to default settings to fix a computer is known in the art.

An example of this is shown by Wysoczynski, from paragraph 26, "The present

invention provides an extension of a crash recovery mechanism that uses default

configuration parameters written to a computer such as a server, for example, and when

the device crashes, the recovery mode can automatically restore the default parameters

and then configure the device by taking the image from the server. In this case, the

user would write the IP address of the crashed device, the name of the image, and the

proper image would be restored to the device." A person of ordinary skill in the art at the

time of the invention would have been motivated to use defaults because, from

paragraph 31 of Wysoczynski, "As the default, the last known good configuration values

are taken."

19.     **Claim 8, 19 rejected under 35 U.S.C. 103(a) as being unpatentable over US**

**5748880 to Ito et al. in view of US 2002/0122050 to Sandberg as applied to claim 1,**

**16 above, and further in view of US 6539499 to Stedman et al.** Referring to claim 8,

although Ito in view of Sandberg does not specifically disclose the user selects the

plurality of automated diagnostic procedures for being performed in the computer

system, having the user select the diagnostics is known in the art. An example of this is

shown by Stedman, from the abstract, "The diagnostic application presents to the user

of the computer system a graphical representation of a computer system (202). The

user is able to click on graphical components of the graphical representation. The

diagnostic application performs diagnostic services on the particular component clicked

on by the user." A person of ordinary skill in the art at the time of the invention would

have been motivated to have user selected diagnostics because, from line 20 of column

2 of Stedman, "In view of the difficulties of known diagnosis and support systems for

computer users [see background of Stedman], a need has arisen for a system that

provides a method and system for providing diagnostic services to computer users that

involves the use of a clickable, graphical representation of a computer system." Further,

Ito discloses that prompt recovery is a goal of the invention, from line 57 of column 1,

Further, it has been conventionally required of the operator to grasp recovery

procedures for recovery from all the faults. Further, even with faults of the same kind, if

different recovery procedures are required for different computers, the operator is

required to be aware of so many procedures for recovery from the faults, which

prevents the operator from promptly effecting recovery from such faults."

20.     Referring to claim 19, although Ito in view of Sandberg discloses does not

specifically disclose the graphical user interface further comprises a selection area for

the user to select the plurality of automated diagnostic procedures to be performed,

having the user select the diagnostics is known in the art. An example of this is shown

by Stedman, from the abstract, "The diagnostic application presents to the user of the

computer system a graphical representation of a computer system (202). The user is

able to click on graphical components of the graphical representation. The diagnostic

application performs diagnostic services on the particular component clicked on by the

user." A person of ordinary skill in the art at the time of the invention would have been

motivated to have user selected diagnostics because, from line 20 of column 2 of

Stedman, "In view of the difficulties of known diagnosis and support systems for

computer users [see background of Stedman], a need has arisen for a system that

provides a method and system for providing diagnostic services to computer users that

involves the use of a clickable, graphical representation of a computer system." Further,

Ito discloses that prompt recovery is a goal of the invention, from line 57 of column 1,

Further, it has been conventionally required of the operator to grasp recovery

procedures for recovery from all the faults. Further, even with faults of the same kind, if

different recovery procedures are required for different computers, the operator is

required to be aware of so many procedures for recovery from the faults, which

prevents the operator from promptly effecting recovery from such faults."

21.     **Claim 12 rejected under 35 U.S.C. 103(a) as being unpatentable over US**

**5748880 to Ito et al. in view of US 2002/0122050 to Sandberg as applied to claim**

**10 above, and further in view of US 6560721 to Boardman et al.** Referring to claim

12, although Ito in view of Sandberg does not specifically disclose again performing the

failed automated diagnostic procedure after performing the automated remedy

procedure, rerunning a test to verify a fix is well known in the art. An example of this is

shown by Boardman, from line 8 of column 3, "'Verify' means that development have

applied a fix for the defect and they require the test team to verify the fix is good by re-

running the testcase." A person of ordinary skill in the art at the time of the invention

would have been motivated to rerun because, as indicated in Boardman, "they require

the test team to verify the fix is good".

22.     **Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over US**

**5748880 to Ito et al. in view of US 2002/0122050 to Sandberg and US 6539499 to**

**Stedman et al. as applied to claim 19 above, and further in view of US "error rate"**

**by MSCD.** Referring to claim 20, Ito in view of Sandberg discloses the plurality of

automated diagnostic procedures **comprises** at least one selected from the group

consisting of: an application based automated diagnostic procedure and another

automated diagnostic procedure (From line 27 of column 5 of Ito, "The classification

column 50b indicates a category to which each error message of the message column 50c belongs, i.e, a system category, a network category, a job category, or a performance category. If an error message does not correspond to any of these categories, "OTHERS" is indicated.").

Stedman further discloses separate areas for initiating different diagnostics, from the abstract, "The diagnostic application presents to the user of the computer system a graphical representation of a computer system (202). The user is able to click on graphical components of the graphical representation. The diagnostic application performs diagnostic services on the particular component clicked on by the user."

Although Ito does not specifically disclose "content based" diagnostics, this is well known in the art. An example of this is error rate, from MSCD, "In communications, the ratio of the number of bits or other elements that arrive incorrectly during transmission." A person of ordinary skill in the art at the time of the invention would have been motivated to look at error rate data because it describes problems in transmission. Ito in particular would have been interested because, as noted above Ito is concerned with various categories of error including network errors.

### Conclusion

23.    The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. See notice of references cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gabriel L. Chu whose telephone number is (571) 272-

3656. The examiner can normally be reached on weekdays between 8:30 AM and 5:00

PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Scott Baderman can be reached on (571) 272-3644. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Gabriel L. Chu
Examiner
Art Unit 2114

gc